DATA ENTRY DATE 5-1-0

INITIALS

April 15, 2008

Mr. Bill Hammer DEQ-PRS P.O. Box 200901 Helena, MT 59620-0901

RE:

Phase 1 Corrective Action Plan & Budget

Ben Taylor Inc. – Former Warehouse, Shelby, MT

DEQ Facility ID #99-95054, Release #4612

Dear Mr. Hammer,

Transmitted herewith please find one copy of the subject document for your review and comment. I look forward to your input on the time estimates included in the budget, as well as volume of materials anticipated to be encountered, number of analytical tests, etc.

We are currently working with Ben Taylor Inc. to obtain information about the former presence of AST's on the property and will be preparing an eligibility application shortly. The business reportedly has photographs showing the aboveground fuel storage systems, and these will be used as documentation for the purpose of the application.

Bill, please let me know if you have any questions and/or concerns regarding this work plan.

Sincerely,

Joseph N. Murphy, F.E., VP

Senior Engineer

NCI Engineering Co.

encl.

cc:

Ben Taylor Inc.

P.O. Box 810 Shelby, MT 59474 Attn: Mr. Greg Taylor

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APR 1 7 2008

Dept. of Environmental Quality

Remediation Division

Subdivisions • Wastewater • Site Design • Storm Drainage • Construction Management and Testing

Municipal / Énvironmental • Structural • Jransportation • Water Resources Airports • Highway





WORKPLAN FOR PHASE I CORRECTIVE ACTION

Ben Taylor Warehouse – BNSF Lease Property 2nd Avenue & US Hwy 2 Shelby, MT 59474

> DEQ Facility ID #99-95054 DEQ Release #4612

> > April 2008

PREPARED FOR:

Greg Taylor
Ben Taylor Inc.
P.O. Box 810
Shelby, MT 59474
Phone: (406) 434-5546
Fax: (406) 434-2596

PREPARED BY:

Joseph N. Murphy, P.E. NCI Engineering Co. P.O. Box 6350 Great Falls, MT 59406-6350 Phone: (406) 453-5478 Fax: (406) 453-2009

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Dept. of Environmental Quality Remediation Division

1.0 SITE HISTORY

The former Ben Taylor Warehouse is located at the northeast corner of the intersection of US Hwy 2 and 2nd Avenue in Shelby, MT. The property is located on the south side of BNSF railroad tracks and within the City of Shelby corporate limits. A convenience store with active UST's is operated to the southwest of the property, and a petroleum bulk plant was formerly operated across the street and northwest of the facility. See Figure 1. The bulk plant is a known petroleum release site.

The property is owned by BNSF and is leased to Ben Taylor Inc. The property was formerly operated by Ben Taylor Inc. as an oil warehouse facility and parking. In January and February of 2007, the warehouse was removed from the property. During demolition of the warehouse, stained soils were observed under the concrete and the property owner contracted with an environmental company to perform a limited site assessment. Soil samples were collected and photographs were taken for the purpose of documenting site conditions and levels of contamination.

Two soils samples were submitted for laboratory analyses. These samples were reportedly collected on 2/21/07 from stained soils in the upper six inches of material underlying the former warehouse foundation. Sample locations are shown on **Fig. 2**. Analytical results are presented in tabular form on the following page (see **Table 1**).

VPH concentrations for both lab samples were below the laboratory's reporting limits. The EPH screen for sample 1592-S was <1010 mg/kg and was not fractionated. The EPH screen for sample 1592-N was 12,100 mg/kg and was fractionated. The C_{11} - C_{22} Aromatics result for this sample exceeded Montana DEQ's RBSL's. The chromatogram was characteristic of a heavy lube oil, as reported by the laboratory.

Groundwater was not encountered during the initial assessment. Based on limited information from the investigation conducted at the former bulk plant west and across the street from the site, it is estimated that groundwater may be encountered at depths of 3-10 feet bgs.

Based on the observations made across the street at the former bulk plant, soil profiles in the area generally consist of three different clay layers. The first layer extends to six feet below grade, and is a non-pliable dark grey clay with no observed sands or gravels and a low moisture content. The second layer from roughly six feet to twelve feet is a medium-brown/grey clay that is much more plastic in nature, and has a higher moisture content than the overlying layer. The third layer begins near twelve feet and is a hard, non-pliable medium brown clay with small gravels present, and has a lower moisture content than the overlying layer.

Reporting of the release was properly reported to Montana DEQ's Petroleum Technical Section. A 30-day Release Report was subsequently prepared by the tenant of the property and was then submitted to the DEQ.

Table 1: Soil Analytical Results – BTI – BNSF Lease Property, Shelby, MT Samples Collected February 21, 2007

· · · · · · · · · · · · · · · · · · ·		Sample ID	1592-N	1592-S
Constituent	Units	RBSL ¹	~6" below	~6" below
PID	ppm		foundation	foundation
VPH				
MTBE	ppm	0.08	< 0.0541	< 0.0578
Benzene	ppm	0.04	< 0.0541	<0.0578
Toluene	ppm	10	< 0.0541	<0.0578
Ethylbenzene	ppm	10	< 0.0541	<0.0578
m+p-Xylenes	ppm	100		
o-Xylene	ppm	100		
Total Xylenes	ppm	100	< 0.108	< 0.116
Naphthalene	ppm	9	< 0.541	< 0.578
C9 to C10 Aromatics	ppm	100	<2.17	<2.31
C5 to C8 Aliphatics	ppm	300	<2.17	<2.31
C9 to C12 Aliphatics	ppm	500	<2.17	<2.31
ТРН	ppm	500	<4.33	<4.63
ЕРН				
EPH Screen	ppm	200	12,100	<1010
C9-C18 Aliphatics	ppm	900	<436	
C19-C36 Aliphatics	ppm	5000	3770	
C11-C22 Aromatics	ppm	400	7480	
ТЕН	ppm	5000	11,600	

^{1 -} RBSL's for surface soil (0-2 ft), assuming <10 to gwt, commercial property

In a letter to the owner dated January 3, 2008, the DEQ-PTS case manager requested the preparation of a Corrective Action Work Plan for the purpose of defining the extent and magnitude of contamination and, further, to potentially cleanup contaminated materials that may be encountered.

On behalf of the site owner, NCI Engineering Co. presents the following Phase I Corrective Action Work Plan (CAP) for DEQ review and consideration.

^{2 –} bold represents detectable concentrations of analyte were reported

^{3 –} shading represents concentrations exceed Montana DEQ RBSL's



FIGURE 1 - VICINITY MAP SCALE: 1" = 2000'

Source: USGS Quadrangle Maps (1986) 7.5-Minute Series (Topographic) "Shelby, Montana"

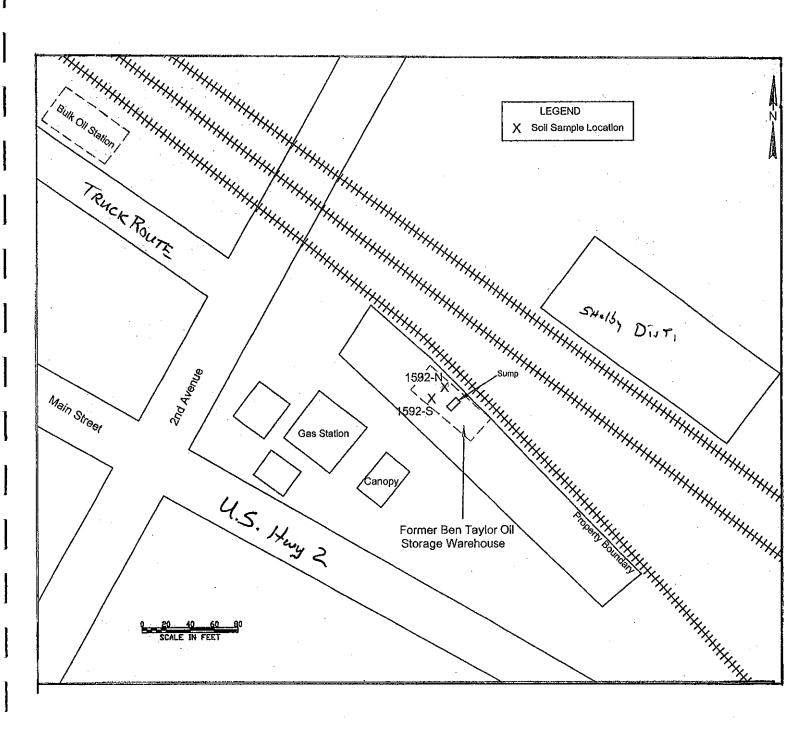


FIGURE 2 - SITE MAP
Ben Taylor Inc. – Former Warehouse
Shelby, Montana

2.0 PURPOSE AND OBJECTIVES OF WORK

Based on Montana DEQ's 1/2/08 request letter, proposed activities will address the following:

- a) Determine the volume (extent and magnitude) of contaminated soil and, if appropriate, make a recommendation for remedial action measures.
- b) If appropriate, perform immediate cleanup of the petroleum contamination concurrent with environmental sampling activities. Available information suggests the residual petroleum contamination is limited to localized, surficially stained areas; and if this proves to be the case, then the most expedient response to achieve closure of the release may be to excavate the contaminated soil, dispose it at one of the local landfills, and conduct the necessary postexcavation confirmation sampling.
- c) Investigation and cleanup should address areas where residual petroleum and staining are present, including the location of soil sample "1592-N" were an EPH concentration of 7480 mg/kg C₁₁-C₂₂ Aromatics was documented.
- d) A sump identified during BNSF's site assessment activities should be decommissioned, if this has not already been done, and an assessment conducted in order to eliminate the sump and its outfall as a potential source of soil and/or groundwater contamination.
- e) Soil and groundwater samples should be submitted to a laboratory for analysis for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) screen, according to the approved Montana laboratory analytical protocol. Soil EPH screen samples exceeding 200 mg/kg, and groundwater samples exceeding 500 μg/l, should undergo further analysis for EPH fractionation and polycyclic aromatic hydrocarbons (PAH's).

3.0 SCOPE OF WORK / INVESTIGATIVE METHODS

3.1 Soil Probing / Excavation

It is proposed that investigative activities be performed using equipment provided by Brian Midboe, a local (Shelby) contractor. Mr. Midboe has provided the following equipment for consideration:

- Caterpillar 430E rubber-tire backhoe
- Hitachi excavator (if needed)
- Dump Truck (end dump) with 13-17 cy capacity

The backhoe will be used for the purpose of assessing the site, i.e., excavating test holes in the areas of stained soils, particularly where contaminant levels exceeded Montana DEQ's RBSL's. Soil samples will be collected at the base of test pits to document the extent and magnitude of soil contamination. These samples will be field-screened using NCI's PID and select samples will be prepared for laboratory analyses.

Visibly stained soils will be excavated and placed in the dump truck and will be hauled to the City of Shelby landfill for disposal. If the groundwater table is encountered, gw samples will be collected for analyses. The sump will be decommissioned, assuming this was not completed previously.

3.2 Sampling and Analysis

During fieldwork, NCI will collect soil samples from the test pits, and soil types will be classified from surface to depth. Soil profiles will be logged, and bag samples will be collected at select intervals for head-space screening using NCI's Microtip photo-ionization detector (PID).

A minimum of one (1) soil sample (typically, samples with the highest PID readings, at the groundwater interface, and/or at depth) from each test pit will be sent to a qualified laboratory for VPH and EPH analyses. The number of samples collected for analyses will be reviewed with the site tenant and with DEQ's case manager as fieldwork proceeds at the site.

3.3 Survey

NCI staff will collect limited topographic information for the purpose of completing a site map. No field equipment will be used for this work. The site map will be developed for the purpose of showing pertinent physical features, former tanks, former building location, utilities, sample locations, and excavation locations.

3.4 Basements and Utilities

NCI will perform a brief inventory of subsurface structures, utilities or basements in the area. Hydrocarbon vapors will be checked in nearby subsurface structures (assuming they could conceivably be threatened by this release) using NCI's PID. If deemed necessary and if accessible, underground utilities such as sanitary sewer, storm sewer, and various manholes (telephone, electric) will be inspected to assess the potential impact of hydrocarbon vapors on said utilities.

3.5 Report

NCI will summarize all field data in report form. The report will contain test pit data, iso-concentration exhibits, interpretations, and recommendations for further remedial action and/or additional investigation. The report will be completed in accordance with DEQ guidelines.

3.6 Quality Assurance/Quality Control

All work at this site will be conducted in accordance with NCI's standard QA/QC procedures on file with DEQ.

4.0 COST ESTIMATE

Work Plan (CAP) Prep. (includes general corresp/commun. w/ DEQ/client):					
Project Engineer	10 hrs @ \$95/hr	\$ 950			
Senior Engineer	3 hrs @ \$105/hr	315			
	Work Plan (CAP) Subtotal	\$1,265			
Fieldwork: Scheduling, Preparation, Fieldwork Oversight, Data Collection:					
Cat 430E backhoe (subcontractor)	10 hrs @ \$105/hr	\$1,050			
Dump Truck, 13-17 cy (subcontractor)	10 hrs @ \$95/hr	950			
Soil Tipping Fee (estimated)	50 cy @ \$28/cy	1,400			
Project Engineer	20 hrs @ \$95/hr	1,900			
Senior Engineer	8 hrs @ \$105/hr	840			
Photo-Ionization Detector (PID)	1 days @ \$70.95/day	71			
Misc. Items (disposable gloves, bags)	Estimate	100			
Subcontractor mark-up	2000 @ 7%	140			
	Fieldwork Activities Subtotal	\$6,451			
Analytical Testing:					
VPH - groundwater	1 sample @ \$120/sample	\$ 120			
EPH Screen – groundwater	1 samples @ \$75/sample	75			
EPH Fractionation/PAH's	1 samples @ \$200/sample	200			
VPH - soil	4 samples @ \$120/sample	480			
EPH Screen – soil	4 samples @ \$75/sample	300			
EPH Fractionation/PAH's	1 samples @ \$200/sample	200			
Sample Preparation	5 samples @ \$10/sample	50			
	Analytical Testing Subtotal	\$1,425			
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Report & Miscellaneous:					
Project Engineer	16 hrs @ \$95/hr	\$ 1520			
Senior Manager	4 hrs @ \$105/hr	420			
CADD Drafter	6 hrs @ \$73/hr	438			
CADD Computer	6 hrs @ \$13.50/hr	81			
Printing, Phone, Fax, Miscellaneous	Estimate	100			
	Report & Miscellaneous Subtotal	\$2,559			

Cost Summary:

Task 1 - Work Plan (CAP)	\$1,265.00
Task 2 – Fieldwork Activities	\$6,451.00
Task 3 – Analytical Testing	\$1,425.00
Task 4 – Report & Miscellaneous	\$2,559.00
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\$11,700.00

TOTAL ESTIMATED PROJECT COST